

Three Creeks (Hutton, Hall/Byers and Cedar Creeks) Water Quality Status May 2004





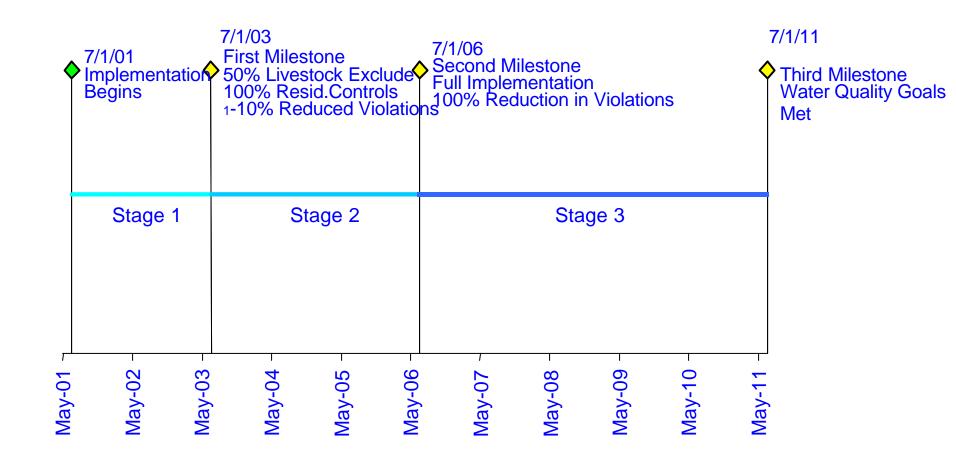


Three Creeks TMDL Background

- In 1998 Hutton Creek, Hall/Byers Creek and Cedar Creek were listed on the 303(d) TMDL Report to EPA for both bacteria violations and for general standardbenthic impairments
- Located in Washington County Virginia

- A Bacteria TMDL was developed in 2000
- A Bacteria TMDL
 Implementation Plan
 was developed in 2001
- Implementation began 2001
- A Benthic TMDL was developed in 2003

Summary of Implementation Plan Drafted July 2001



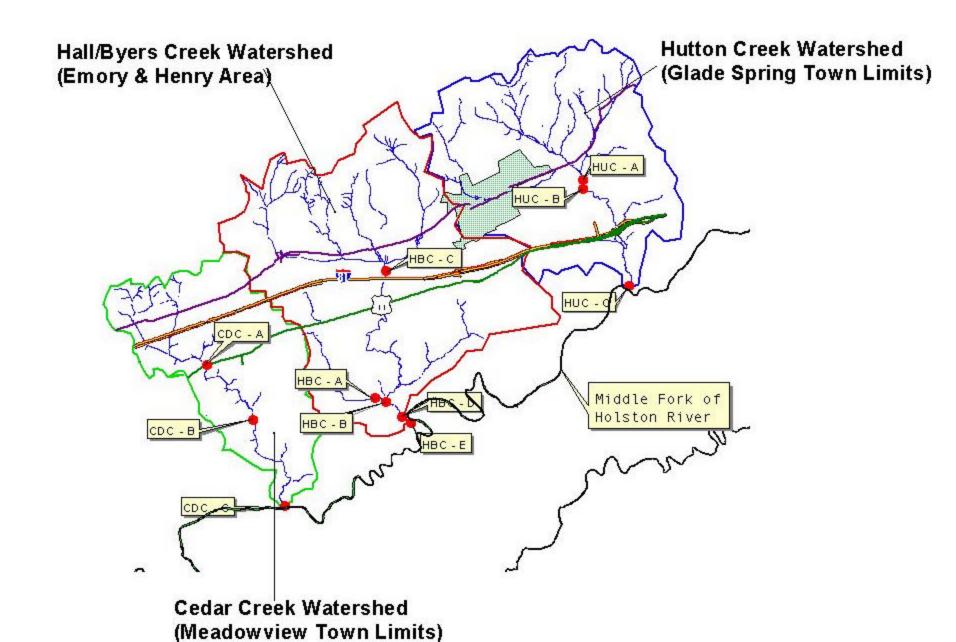
History of Land Treatment Efforts

- TVA, NRCS, USF&WS and HRSWCD have promoted stream protection and grazing land improvement practices since 1987
- Nearly \$1,000,000 in Cost-share dollars have been spent in these watersheds within the last ten years

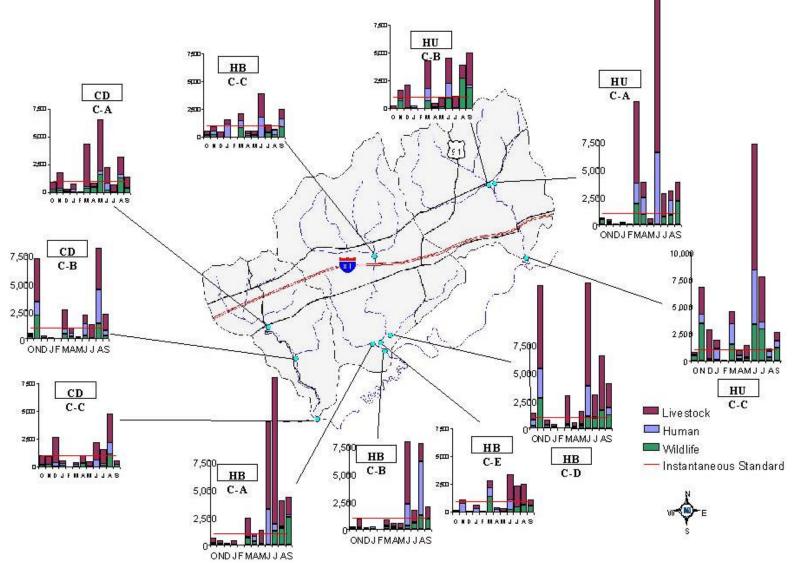




Monitoring Sites in Three Creeks Watershed

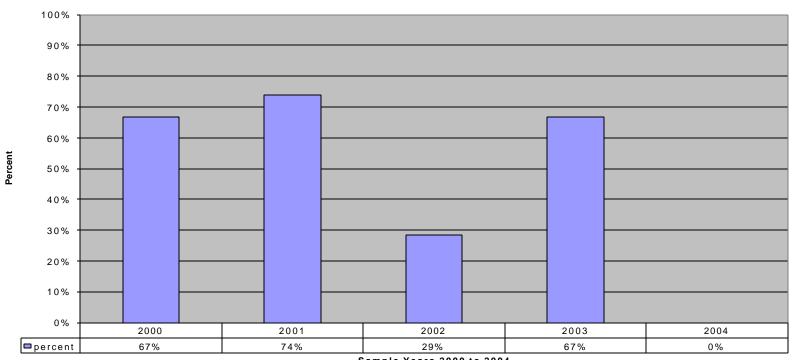


Results of Bacteria Source Tracking Data for Three Creeks Watersheds



Percent Bacteria Violations on Hall/Byers Creek 2000-2003

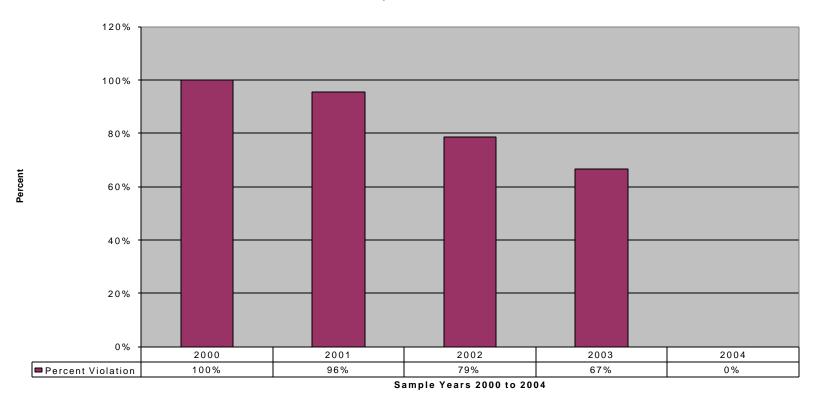
Byers Creek Percent of samples above 235 cfu/100ml E.coli.



Sample Years 2000 to 2004

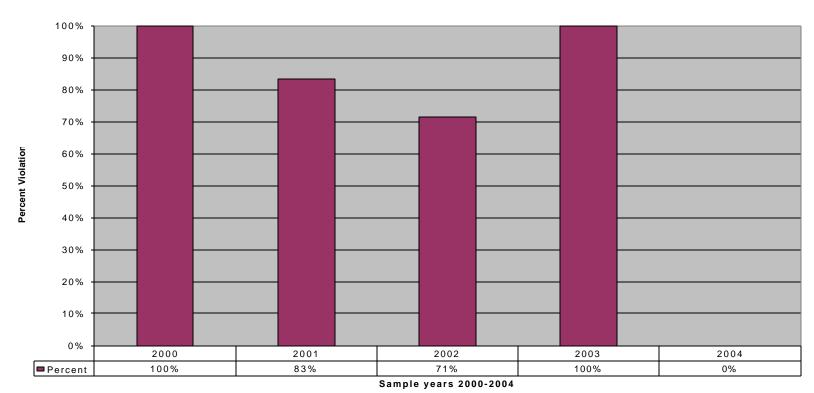
Percent Bacteria Violations on Hutton Creek 2000-2003

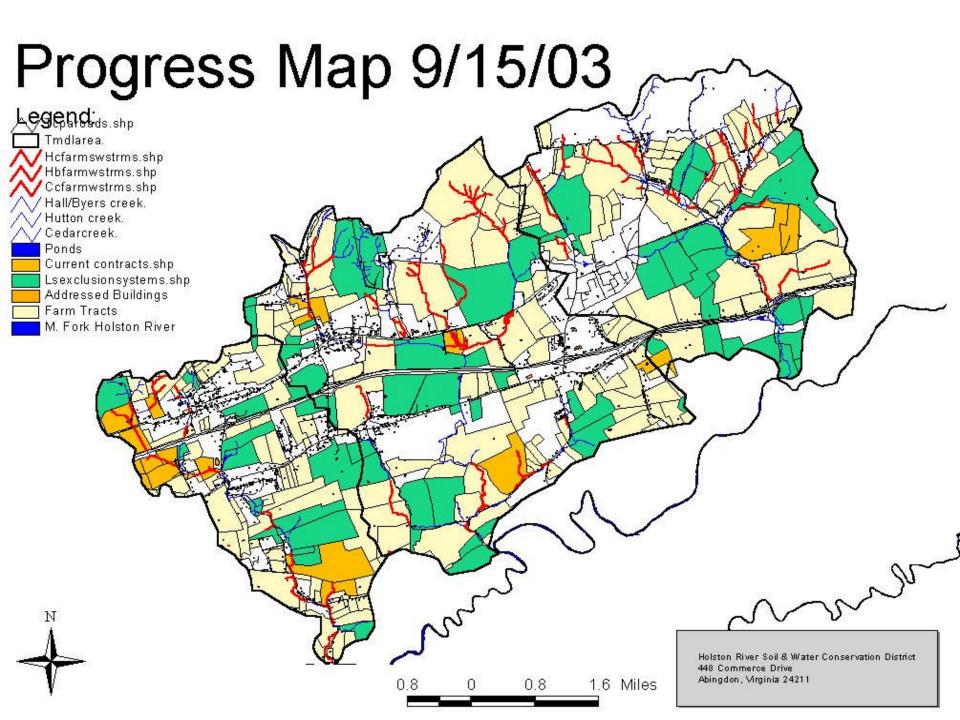
Hutton Creek Percent Samples above 235 cfu/100 mL E.coli



Percent Bacteria Violations on Cedar Creek 2000-2003

Cedar Creek Percent Samples Above 235 cfu/100 mL E.coli.





Best Management Practices Installed by Watershed as of May 10, 2004

| Practice | Cedar | Hall | Hutton |
|-----------------|---------|---------|---------|
| Troughs | 8 | 27 | 20 |
| Reservoir | s 1 | 3 | 5 |
| PWC | 3 | 3 | 0 |
| Wells | 0 | 1 | 1 |
| Pipeline | 6,002' | 19,735' | 13,585' |
| Fence | 15,087' | 35,240' | 39,265 |

As of October 2003 10% Reduction in Runoff for Pasture and Hay Land in the Hutton Creek Watershed

13 acres of Forested
Riparian Buffer have
been installed on
Hutton Creek and
1.5 acres are under
contract to be

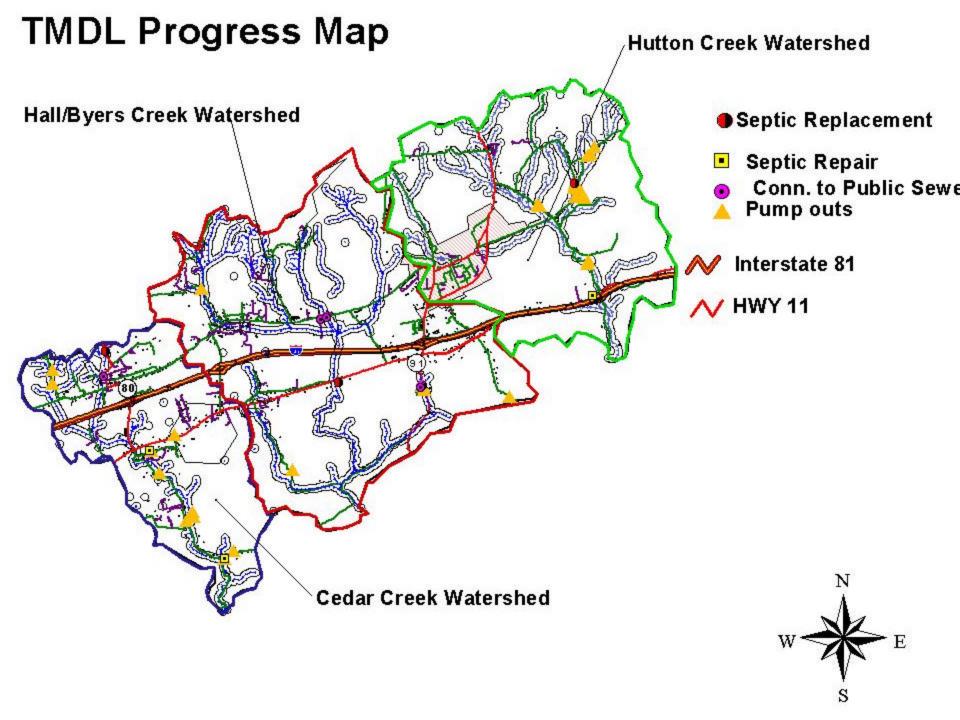
installed.



Livestock Exclusion Progress as of May 10, 2004

| | No. Contracts | Linear/ft/ streambank Protected | Acres of Pasture Improved |
|-----------|------------------|---------------------------------------|---------------------------------|
| Completed | 27 | 47,616 | 2,080 |
| Active | 14 | 38,475 | 1,478 |
| Total: | 41 | 86,091 | 3,558 |

⁹ miles of pasture streams are excluded from livestock in the Three Creeks Watershed with an additional 7.3 miles under contract.



Three Creeks Residential Corrective Actions Progress as of May 10, 2004

- 103 Contracts Complete
- 12 Active Contracts
- 87 Septic Tanks pumped
- 1 Connection to Public Sewer Tap Installed
- 4 New Septic Systems installed
- 6 Septic System Repairs
- 1 Alternative On-site Waste Treatment System Installed

- \$4,540 Allocated
- Over \$24,218 Spent on completed projects
- \$10,056 of TVA funds have been utilized to supplement cost share rates on several projects.
- More than \$7,760 Cost-Share has been spent on completed projects

For More Information Contact

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